

WHAT IS CLAIMED IS:

1. An image forming apparatus including an image control portion for expanding predetermined information supplied from an external device, into print
5 information, and a printer control portion for performing print control based on the print information, said image forming apparatus being adapted to print the expanded information in a predetermined recording medium under said print control, said image
10 forming apparatus comprising:

process cartridge means which transmits and receives signals for said print control to and from said printer control portion, which executes an electrophotographic process according to the signals
15 for the print control, and which is detachably attachable to a main body of said image forming apparatus;

non-volatile memory means which stores operation information including information concerning an
20 operation quantity of said process cartridge means and which is mounted in said process cartridge means;

means which performs read/write control of said operation information out of or into said non-volatile memory means, according to the print control from said
25 printer control portion;

switch timing determining means which determines switch timing of a condition for the

electrophotographic process, based on said operation
information stored in said non-volatile memory means
and a state of said printer control portion; and

switching means which switches the condition for
5 the electrophotographic process at said switch timing.

2. An image forming apparatus according to Claim
1, wherein said non-volatile memory means includes a
ferromagnetic memory or a ferroelectric memory.

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3. An image forming apparatus according to Claim
1, wherein said switch timing determining means
determines a time when said printer control portion is
not in execution of said electrophotographic process,
15 as said switch timing.

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4. An image forming apparatus according to Claim
1, wherein said image control portion has means which
transmits number of pages in a request for said print
20 set from said external device, to said printer control
portion and wherein said switch timing determining
means determines a time when said electrophotographic
process is not under way after completion of said print
through said number of pages, as said switch timing.

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5. A method of controlling an image forming
apparatus for expanding predetermined information

supplied from outside, into print information and printing the expanded information in a predetermined recording medium under print control based on said print information, comprising:

- 5 an electrophotographic process step of executing an electrophotographic process according to said print control;

10 a non-volatile memory step of storing execution information including information concerning the number of executions of said electrophotographic process step, according to said print control;

15 a switch timing determining step of determining switch timing of a condition for said electrophotographic process, based on said execution information stored in said non-volatile memory step and a state of said print control; and

 a switch step of switching the condition for said electrophotographic process at said switch timing.

- 20 6. A method according to Claim 5, wherein said switch timing determining step determines a time when said electrophotographic process is not under way, as said switch timing.

- 25 7. A method according to Claim 5, wherein said predetermined information supplied from the outside includes number of pages in a request for said print,

and said switch timing determining step determines a time when said electrophotographic process is not under way after completion of said print through said number of pages, as said switch timing.

ABSTRACT OF THE DISCLOSURE

Provided is an image processing apparatus that maintains uniformity of image quality in print of identical images and that improves the performance of a printer.

An image forming apparatus includes an image control portion for expanding predetermined information supplied from an external device, into print information, and a printer control portion for performing print control based on the print information, and is adapted to print the expanded information in a predetermined recording medium under the print control. The image forming apparatus is configured to have a process cartridge unit which transmits and receives signals for the print control to and from the printer control portion, which executes an electrophotographic process according to the signals for the print control, and which is detachably attachable to the main body of the image forming apparatus, a non-volatile memory unit which stores operation information including information concerning an operation quantity of the process cartridge unit and which is mounted in the process cartridge unit, a unit which performs read/write control of the operation information out of or into the non-volatile memory unit, according to the print control from the printer control portion, a switch timing determining unit which